

REMARKS

Claims 1, 3-10, 12-14, 16-28, 31-36, 38, 39, and 42-44 are currently pending in the subject application and are presently under consideration. Claim 34 has been amended to correct a minor informality. Applicant's representatives respectfully request that this amendment be entered as no new subject matter has been added and the amendment does not require any further search or undue burden upon the Examiner. A version of all claims can be found at pages 2-7 of this Reply.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-31, and 34-43 Under 35 U.S.C. §102(e)

Claims 1, 3-10, 12-14, 16-28, 31-36, 38, 39, and 42-44 stand rejected under 35 U.S.C. §103(a) as being obvious over Green (US 2004/0117802 A1) in view of Kreidler, *et al.* (US 6,975,913, hereinafter referred to as "Kreidler"). This rejection should be withdrawn for at least the following reasons. Green and Kreidler either alone or when combined do not disclose or suggest all elements of the claims.

A rationale to support a conclusion that a claim would have been obvious is that ***all the claimed elements were known in the prior art*** and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385, 1395 (2007). "[R]jections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR v. Teleflex*, 550 U.S. 398, 127 S. Ct. 1727 (2007) *citing In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006).

The claimed subject matter relates to relates generally to industrial control systems, and more particularly to an architecture that can facilitate web-based implementation of HMIs (*see e.g.*, pg. 8, ll. 23-26) in an industrial automation environment (*see e.g.*, pg. 10, ll. 27-28), wherein

the HMI can be customized to select unique HMI attributes, *e.g.*, based upon attributes of a user (*see e.g.*, pg. 11, ll. 7-12) or a device (*see e.g.*, pg. 17, ll. 5-13). In particular, independent claim 1 (and similarly, independent claims 14 and 34), recites, “a HMI rendering component that generates ***a browser-based HMI within the browser session.***” The cited references alone or when combined fail to disclose or suggest such features.

Rather, Green discloses an event monitor that facilitates monitoring and reporting data events occurring through an enterprise (Abstract). Green discloses two types of brokers: an enterprise broker (*e.g.*, element102) that is maintained on a central server, and a client broker (*e.g.*, element103) that is maintained by client devices. In particular, while client brokers can employ web-based applications such as standard browsers, they are not themselves web-based, but rather, proprietary applications that can be adapted to manipulate browsers or other disclosed features. Specifically, each client broker is embodied as user-configurable, application-specific software ([0035], [0039]) and is coupled to an enterprise broker ([0031]) in order to effectuate the event monitoring.

In contrast, applicant discloses that the claimed browser-based HMI can solve problems associated with traditional HMIs (like those detailed in Green) by requiring no application-specific software (such as the client broker of Green), and thus installation, configuration, and updates need only be performed on a set of servers rather than on a typically much larger set of clients, and, further, the clients need only run a browser instead of a software such as the client broker, all of which can facilitate increased efficiency and lower costs and resource utilization (*see e.g.*, pg. 3. Line 17 – pg. 4, line 2). On the other hand, Green expressly relies upon client brokers to communicate between clients and server. These client brokers would all need to be memory resident and individually updated upon changes to the enterprise broker, which effectively illustrates that Green does not contemplate, much less disclose or suggest, ***a browser-based HMI within the browser session***, as claimed.

The Final Office Action (dated May 5, 2009) argues that these features are identically disclosed at paragraph [0069]. However, the indicated portions of Green teach that client-resident software, specifically a portion of the client broker described as the user interface module, *employs* a HMI to display interactive pages. Appreciably, *employing* a physical display to present data is materially distinct from generating ***a browser-based HMI within the browser***

session. The addition of Kreidler does not remedy the aforementioned deficiencies with respect to Green. Accordingly, this rejection with respect to claims 1, 14, and 34 as well as all claims that depend there from should be withdrawn.

In addition, independent claims 14 and 34 further recite, “**determining parameters for rendering a HMI to an external device**”, which is neither disclosed nor suggested by Green or Kreidler. Rather, at [0039] cited in the Final Office Action, Green discloses that the event monitor can build or construct interactive pages. However, interactive pages do not constitute a HMI as claimed, and further building such generic pages does not disclose *determining parameters for rendering a HMI* (e.g., in accordance with the capabilities of the external device).

Furthermore, independent claims 14 and 34 also recite “automatically updating a HMI rendered in browser format **upon the occurrence of a change of a state in an automated industrial environment.**” At page 2, the Final Office Action concedes Green does not teach the recited features, yet at page 3 contends that Kreidler discloses identical features at column 20, lines 43-53. Yet, Kreidler fails to disclose or suggest these features. At the portions indicated, Kreidler instead describes that a standard web browser (as opposed to a browser-based HMI) can be manipulated by a user. It is readily apparent that updating a browser upon a change input by a user is materially distinct from automatically updating a HMI rendered in browser format **upon the occurrence of a change of a state in an automated industrial environment.** Hence, claims 14 and 34 are believed to be allowable for yet another reason.

In addition, dependent claim 4 (and similarly dependent claims 21 and 36), recites, “the HMI rendering component comprising an artificial intelligence component, the browser-based HMI generated at least in part upon *inferences made by the artificial intelligence component regarding a most-desirable rendering.*” Both Green and Kreidler are materially deficient with respect to these recited features. At page 3 of the Final Office Action it is argued that Green discloses identical features at [0030]. However, Green does not disclose these features, but rather describes evaluation among various topologies for selecting a preferred topology. In particular, selecting a preferred topology in order to optimize message flow is materially distinct from determining a most-desirable rendering of the browser-based HMI.

For at least the foregoing reasons, all claims are believed to be allowable over the cited references. Accordingly, it is respectfully requested that the rejection of claims 1, 14, and 34 and all claims that depend there from be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [ALBRP316US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,
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